Transcription of Press Conference with Mike Griffin at NASA's Kennedy Space Center 1-17-06

Transcribed by Corey Schubert and Mandi Falconer

DEAN ACOSTA: Good morning and welcome to this morning's New Horizons briefing with the NASA Administrator, Mike Griffin, who is to my left. To his left is NASA Deputy Administrator Shana Dale. So we have a treat for the media this morning and the folks, our viewers that are watching, to have both our two senior leaders here to discuss today's events, as well as any other questions that the media wants. As protocol and standard procedure, I'd ask that when you ask your questions, please identify who you are and which affiliate, who you work for before, and please direct the question to a particular person up here when you ask it. Also, please turn off all your phones and Blackberries and those types of things, as well. All right, appreciate it. Before we get started, let me turn to NASA Administrator Michael Griffin.

MIKE GRIFFIN: Well, as you've come to expect from me, I have no real remarks. It's a great day. We're glad to be here. This is a real milestone event for NASA and I look forward to taking your questions.

SHANA DALE: This is the first launch that I will attend coming in as the Deputy Administrator of NASA. I came over in mid-November, so I'm very excited to be here. It's an exciting mission and we are looking for a great day today.

ACOSTA: Terrific. Thanks, Shana. Thanks, Mike. All right, we'll go ahead and get

started with your questions. Let's start off with Craig, right here in the front.

CRAIG COVAULT: Good morning. Craig Covault with Aviation Week. Big picture,

not necessarily focused on the year's coming budget: how would you assess the overall

health of the robotic planetary program given overall budget realities in the coming years

and, down to the more specific, your confidence in cost and schedule for Mars science

lab, which I believe is probably your biggest near-term new project.

GRIFFIN: Overall, I think all components of NASA continue to be healthy. You'll see

that NASA is fully supported and the planetary science program is doing well. With

regard to Mars science lab, that gets into specifics that I'm just not prepared to go into at

this time, Craig. Mars science lab, obviously, is our next big mission to Mars. We will

design a mission that fits the budget.

ACOSTA: Right up front.

MIKE SCHNEIDER: What can you tell us about...

ACOSTA: Don't forget to identify yourself.

SCHNEIDER: I'm sorry. Mike Schneider, Associated Press. What can you tell us about the prospects for a May shuttle launch and do you see anything right now that would prevent a May shuttle launch?

GRIFFIN: I'd rather use this press conference to talk about Pluto New Horizons if folks didn't mind, but with regard to May, we are still targeting May for the shuttle. We will shortly be gathering within the shuttle program to pick a specific date. As I sit here today, we think that date will be something in May. If it slips to July, it slips to July. We launch when we are ready and not before.

DAN BILLOW: Dan Billow, WESH TV. I do have a shuttle question. I'd just like to ask if you could tell us what you need, what NASA needs to fly these 18 or 19 missions that you've got on the schedule? In the current budget environment, can you do that? What do you need to make those missions happen?

GRIFFIN: What we need is to stay with our average statistics over 25 years of shuttle flights. As of April 12, 2006, NASA will have been flying the shuttle for 25 years exactly. We will have flown, to that point, 114 missions in 25 years. That works out to an average of 4.56 missions per year on average, even taking into account two accidents and all the downtime that we have had. So, when we return to flight, it will be with three fresh orbiters out of depot maintenance. It will be to return to flight with greatly increased knowledge that we have never had before. Yet, all we have to do is execute our average performance over those 25 years in order to be able to complete the station.

It has been a problem getting back to routine flight to understand what has caused the

foam to come off and how to mitigate it. We think we're there after that one test flight

last August. We think the second one will bear us out and then we expect to get going

and finish the station.

ACOSTA: I would like to remind everyone that this is a New Horizons press conference,

so if you could ask some of those questions as well, it would be appreciated.

GRIFFIN: I haven't thought that we were restricting my press availability so much

that...

ACOSTA: No, no no...

GRIFFIN: ... you guys were being forced to resort to this as an opportunity to ask about

the shuttle.

BILL HARWOOD: Bill Harwood with CBS. This isn't about the shuttle, but it's about

space science. I just wanted to follow up on Craig's question. A lot of the science team

is here for New Horizons. Obviously, there is a tremendous amount of concern, and I'm

stating that from what I hear from scientists, that moon/Mars is going to really whack the

science program in the years to come. I mean, can you just expand on what you said to

Craig, or do you have any reassurance to give that community on what is coming down

the road after your speech and all of that.

GRIFFIN: We are not, in your words, we are not "whacking" the space science program to pay for human exploration. This is not "The Sopranos," we don't whack people or programs here. We have, of course, in this nation – I do not need to be the one to tell you this – a difficult budgetary environment. NASA is not looking forward or expecting any gifts of robust growth from either the administration or the Congress. We expect to keep approximately the funding we have, which will essentially be a very low growth funding profile and therefore, all of the components, each separate component of what NASA does can expect to have, at best, only modest growth. The difference between cuts and

modest growth, I guess, needs to be explained to people. I think we're doing well and

within NASA the space science program is doing well and will continue to do well.

PETER KING: Good morning. Peter King with CBS News Radio. I'm sorry, I've got to get back to the shuttle. Suppose if we do not fly by May or July and it keeps going into the fall and next year, at what point do you start, if you will, whacking flights in order to get the required flights you need by the time the shuttle is retired in 2010.

GRIFFIN: I'm sorry. You're into speculation and I'm just not going there. We're planning for a flight in late spring or early summer. We believe it is going to be a good one and then we will be back on the road to success. If we don't have success, then we'll have to rethink.

ACOSTA: Let's go right up front here.

ROBERT GASS: Robert Gass, Interspace News, and I actually have a planetary exploration question.

GRIFFIN: Oh, be still my heart.

GASS: Does NASA intend to continue this trend toward smaller, mission-specific spacecraft a la New Horizons, or perhaps return to the larger space cruiser mission a la Cassini?

GRIFFIN: Well, NASA will do both. New Horizons is the first mission in our New Frontiers line, which builds and expands on the Discovery line, which you know is kept around the range of, I don't know the exact number, but around \$400 million dollars in current dollars. Discovery, first implemented under then associate administrator for space science, Wes Huntress, and a good friend of mine, has been a marvelously successful program, and yet the cap does cause us to restrict missions to a certain size. New Frontiers raises that cap and allows us a substantially increased science portfolio, yet without opening the purse strings. So, I think it's a very good plan. I'm frankly thrilled with it. The folks that have planned space science for us in the last few years have done a great job. That said, there will always be a need for missions which are larger than can be contained in a cost cap mission. I don't think we can do James Webb space telescope on a cost cap, just as one example. We could not have done Hubble Space Telescope on a cost cap. There is no one raising their hand saying, in retrospect, "I

don't think we should have done Hubble." So, there will always be a need for missions which just simply can't be contained within a cost cap. Those missions have to be few and far between. They come, obviously, on a less frequent basis. They need to be missions that are so compelling that spending a few billion dollars on one does continue to attract broad support, because without that broad support, they won't happen. But, there are such missions and NASA will continue to do them. We could not have done what Cassini is doing on a cost cap.

PATRICK TERPSTRA: Patrick Terpstra with Central Florida News 13. I wanted to ask you about the budget cycle that's about to come up before Congress. There are a number of members of Congress that have questioned funding NASA to the full levels that you all would want in the wake of Katrina, with the Iraq war, and things like that. How can you be confident that at the end of the day, you'll be able to win them over?

GRIFFIN: Budget questions I am going to defer into the budget press conference that I promise we'll be giving on the 6<sup>th</sup> of February. It's premature for us to be discussing the fiscal '07 and beyond budget. Sorry.

ACOSTA: Irene.

IRENE KLOTZ: Irene Klotz with Reuters. I seem to remember when the project

Prometheus was rolled out a couple of years ago that the DOE supply of the RTGs was
almost at an end. I know that the RTGs on New Horizons was reserved and I don't think

that there was anything else left. In light of the cancellation of Prometheus, could you talk a little bit about what you are looking at downstream for these missions that cannot use solar energy?

GRIFFIN: Well, first of all, Prometheus would have used a nuclear reactor, not an RTG. So, we're mixing nuclear components here. In fact, NASA will be using an RTG for the Mars science laboratory, so this is not our last RTG mission and it is far from our first. Cassini, Galileo, Voyagers, many others before have used RTGs and many will again. Production of RTGs within the Department of Energy, right now, is limited and steps are being taken to address that. We don't fly them often enough that it's a problem right now. So, again, Mars science lab, our next mission to Mars, will carry an RTG.

FREDERIC CASTEL: Frederic Castel with BBC News Service. Mr. Griffin, the ESA Columbus module is about to get into KSC. When do you expect to have it flown on the shuttle, and what is also your best bet about the number of shuttle flights before retiring shuttle?

GRIFFIN: Our best guess at this point is that the shuttle will, as I've said on many occasions, execute something like 17, 18 flights between now and retirement. But it is the date which we are picking, not the number of flights, and my comments earlier on shuttle performance were reflective of average performance in the past that would allow us to do that number of flights. As to when Columbus flies in the station assembly schedule, I'm sorry, I don't have that in my head. I just don't know.

REPORTER: Randy Shield (?), WSGU (?) radio. Mike, we've been very blessed recently with a lot of spacecrafts that have gone well beyond their useful lifetime.

GRIFFIN: We sure have.

REPORTER: You know, the Mars rover, Voyager, Pioneer, many others. As a result of that, having to keep them in operation is costing us a lot more money than was originally budgeted for. How do you balance the act?

GRIFFIN: That's a very good question when it does cost money to continue to operate spacecraft in terms of deep space net support or other tracking support in terms of the operational crews who sustain them (the mission controllers). And so, you have to make on the case of each individual mission, a reasoned decision as to when the science value that you're getting from the mission is no longer worth the money that you're paying. And sometimes you have to turn missions off, and we have done that. We aren't going to be turning off Spirit and Opportunity any time soon; they're the only two rovers we have on Mars and we're quite happy with them. There may be other science missions that, that we would elect to turn off because we no longer see any marginal value to the data in comparison to the cost. I recently decided not to turn off the TRMM mission, the tropical rainforest rainfall monitoring mission, because it was the only method we had to gather the kind of data that allows us to track the formulation of hurricanes and help predict where they're going to go. I was pleased things worked out the way they did, because

TRMM was very helpful in plotting the course of Katrina. So we think very carefully before we turn one off, but sometimes you have to.

REPORTER: Hi. Andy Vaughn (?), Denver Post. Can you talk about the progress of the CEV project, and when you think a winning team might be selected?

GRIFFIN: When the winning team might be selected? I believe we're aiming for selection in July.

REPORTER: Bids are due, what, in March? I was wondering how long after that a team will be selected.

GRIFFIN: Three or four months after that.

JOHN KELLY: John Kelly with Florida Today. Have you had a chance to meet with the science team while you've been down here? And I guess I'm just wondering, you've worked on some of these kinds of projects from various aspects before. This particular team is going to have put in, what, a decade ahead, and now, and then they're going to wait a decade to get there. And I just wondered what you think about the sort of dedication, the time commitment -- I mean, everybody's talking about the money investment, but the time commitment that these guys put in on something like this seems, really, a long time.

GRIFFIN: To, to make a decision to work in the field of space science is almost the ultimate delayed gratification. Yes, the principle investigator on this mission, Allen Stern, and the science team -- many of them, too numerous to mention -- who have worked on this have devoted major portions of their careers to it and have a good-sized chunk yet to go before they see the results. It took Cassini from what, a 1997 launch till 2004 to get into orbit, and many years of preparation before that? God has laid out the solar system in a way that requires a certain amount of patience on the part of we who choose to explore it. I have nothing but admiration for the folks who invest this kind of time and effort and energy to make these wishes come true.

REPORTER: (?), Boulder, Colorado. I was curious to know, in the mission literature they talk about, if things go well and we reach Pluto and the spacecraft's functional, then there's the possibility of an extended mission to the Kuiper Belt, depending on NASA funding. If things went well, what would the possibility be that NASA would say, "Well, I don't think we're going to have the money for two Kuiper Belt objects?"

GRIFFIN: It is very unlikely that I would be the Administrator at that point, and so...In fact, I think I'll be quite lucky to be looking at the divot from the correct side. But I would, I would, in this case, depart from my normal practice and I will speculate that we won't turn off a properly operating spacecraft that is penetrating the Kuiper Belt.

CRAIG COVAULT: Craig Covault with Aviation Week. On the New Horizons atlas, the review was quite rigorous, and I believe SMA may have even cast initially a "no vote" on

it. Can you just take a moment and address that process that ultimately approved the vehicle?

GRIFFIN: Sure. I thought that process was NASA operating with the advice and counsel from the contractor community and, frankly, our DOE partners. I thought that was NASA at its finest. We had several months of tests, deliberations and discussions, which culminated in a four-hour meeting at Headquarters last week, where the disposition was that this tank for this mission was fit to fly. Craig, I know that you're knowledgeable of this issue, but for those on TV, I'll recap. We had a situation where the qual (?) tank, which was in notably worse shape, even starting out, than the flight tank, failed qual (?) on the very last cycle of many dozens of pressure cycles to test it, and failed at 94 percent of the proof pressure. So, the question was, was this tank on this vehicle for this mission fit to fly? And when we looked at the flight loads for this mission profile, which are among the lower that a rocket of this type would expect to see, when we looked at the construction quality of this particular tank, and the fact that it has, after extensive inspections, no cracks or flaws that are detectable at all, we made the determination that it was good to go.

KLOTZ: Irene Klotz with Reuters. Especially now, with the freedom to buy Russian, do you have any people looking into any contingencies for launching space station components on ELVs in case the shuttle's not able to live up to the job?

GRIFFIN: Well, we're not doing that, because there would be, frankly, a great deal of expense involved in converting, you know, any expendable launch vehicle into a carrier of station components. And the money that we have available for space station assembly assumes that it will be done using the shuttle. That is the proper vehicle to complete the

task, and that's what we're spending our effort and time and money on.

DAVID BROOKS: David Brooks, BBC. Does NASA have any plans to send a probe to the newly discovered 10<sup>th</sup> planet?

GRIFFIN: Not yet.

ACOSTA: Running out of questions. Alright, up front, Mike.

MIKE SCHNEIDER: Mike Schneider, Associated Press. I know books have been written about this, but if you could just, a few seconds. We're approaching the anniversary of Challenger, and I was wondering if you could just offer some perspective on looking back 20 years, what Challenger's legacy has been to the space agency and to space exploration.

GRIFFIN: That's a very sobering question for this time of year and this year. And frankly, it's sobering beyond Challenger. This is the time of year when we think about the Apollo 1 crew, lost in 1967, the year that I turned 18 and was a freshman in college and

was aiming for a career in the space business. And it's the time of year, just three years ago, where we lost the Columbia crew, as well. And I think about all of those folks. I personally knew many of them. Not all of them, but... This is a time to think about those kinds of losses. And you're right, books have been written about it, and I can't add much. But I will say, when I think about it, and I've mentioned this in other fora (?), there's a book I'm fond of by Ernie Gann, a noted aviation writer, called "Fate is the Hunter," and it's a book about the early days of air transport. The creation, in fact, of the global air transport system, which started in the United States and spread throughout the world. And Ernie flew as, initially, a copilot and later a commander in that system from its earliest days through the early 1950s, by which time it was pretty well established. In that book, when you open it up, in the modern edition -- in the first edition, it was in the back of the book, but now it's in the front, where I think it ought to be -- Ernie has a small salute to the people who didn't make it. Page after page after page of flight crews who didn't make it as we learned, as flawed human beings, how to go about developing the world's most reliable transportation system of any kind. Today, you are, I think, approximately as likely to be struck by lightning and die as you are to die in a crash of a major airliner. But the knowledge that we gained was gained only through many, many, many losses. And I think that that is the perspective with which we have to look at our losses in space flight. We are, as fallible and flawed human beings, trying very hard to learn how to do something which is very, very difficult to do. Space flight is the most technically challenging things nations do. Individual processes -- brain surgery or recombinant DNA may be, in their details, more complex than the execution of space flight missions, whether robotic or manned -- but when all is taken together, the industrial

support base, the civil engineering operations, the flight operations, when you add it all together, OK, only the world's premier nations are able to engage in space flight. It is difficult, it is dangerous and it is expensive, given the technology that we enjoy today. We are learning how to expand that technology into new arenas, and as we do and when we do, space flight will become easier. But every single one of us will have grey hair or will have lost it, as I have, before much of that comes true. It's a tough job, and the losses that we have sustained so far reflect the difficulty of the challenge and our limitations as human beings that we try to push beyond as we try to invent this new technology. So that's what I think about it. The Challenger crew that perished in the wake of that, in the wake of those mistakes, we learned how to design solid rocket boosters that have now executed 178 usages -- two per shuttle mission -- with no further failures. OK, the solid rocket booster of today has, in my estimation, the best record of any space flight component that we currently use. It will be a valuable component as we push out beyond low-Earth orbit to return to the moon and to go to Mars. We will be using the solid rocket booster or its derivatives on the heavy lifters that take us to Mars and we got that from the Challenger crew. So, that's part of the learning process. I'm afraid -- I know -- that in the course of this, there will be other opportunities to learn, and they will be sober opportunities surrounded with black crepe. But we will learn in the same way that the nation and the world learned how to do air transport, and it will be difficult. Thank you.

ACOSTA: We have time for about one more question.

HARWOOD: Bill Harwood again, and I want to ask you a New Horizons question because nobody else did. Can you give us your perspective on the value of going to the Kuiper Belt, of exploring Pluto, going to a realm that most people on the street have really no sense of, in terms of how far away it is or what value it is to learn about it, in terms of the evolution of the solar system. So, basically, anything you want to say about New Horizons.

GRIFFIN: Well, I would ask, to people who would ask that question, I would ask the question of you: Of what value do you think it might be to be able to examine the primordial constituents from which the solar system and all the planets, and we ourselves, were formed? Because it is believed that the Kuiper Belt contains the remnant objects from the formation of the solar system that, that never coalesced into planets or mostly didn't coalesce into planets because they were simply too far out. I can't predict -- I'm not smart enough or skilled enough to be able to predict what that value might be -- but it is fantastically interesting to me to have a chance, maybe within my lifetime, for scientists to see up-close what those objects look like and to begin our reconnaissance of that region of space.

ACOSTA: Alright. That's going to conclude today's media availability with the Administrator and deputy administrator. Thank you all. Again, a reminder that the New Horizons launch window opens at 1:24 Eastern until 3 o'clock. So, hopefully, everyone will be sticking around. Have a great day. Thanks.